

Article

Customer Value Co-Creation: Environmental Sustainability as a Tourist Experience

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Abstract: Increasingly, environmental sustainability has become an important consideration for customer value co-creation, which is collaboration between a firm-provider and its customers to jointly create value. Our research question is therefore “how does customer value co-creation (CVC) enhance environmental sustainability?” We argue that attention to CVC globally would significantly enhance environmental sustainability in emerging markets. The findings of the study revealed that firms that do not enhance customer engagement and their environmental sustainability will lose patronage. Secondly, the attitude of most of these tourists who continually visit unclean tourism destinations such as littered beaches and polluted water bodies would continue to make these TDs not improve in their environmental products, hence, performing poorly in environmental sustainability performance. This study makes important contributions to research and practice of connecting customer value co-creation to environmental sustainability in emerging markets. Our study finds out that CVC in emerging markets can result in environmental sustainability.

Keywords: value co-creation; environmental sustainability; tourist experience



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1. Introduction

Sustainability has been extensively viewed as presenting a substantial promise as a medium to address the tourism impacts as well as sustainability [1]. The consideration of innovation in tourism has been considered an avenue to advance tourism and sustainability (e.g., [2]). Hence, this study in line with the call for innovation in tourism research presents a consideration of customer value co-creation (CVC), defined as a collaboration between a firm-provider and its customers to jointly create value [3,4], where value refers to the benefits eventually obtained by customers through their involvement and assessment when using or consuming product-services [5]. Engagement theory is focused on the level of the customer’s psychological, cognitive, physical and emotional involvement in association with service providers and other actors [6,7], whereas the co-creation perspective is concerned with resource integration, interactions and networking among the firm and customers.

Increasingly, environmental sustainability becomes an important consideration for customer value co-creation [8–10]. Recently, some studies have drawn attention to exploring sustainability marketing in the context of tourism to enhance CVC [11]. Environmental sustainability moves beyond green marketing [12] and presents an opportunity also for green human resource management [13] and product innovation [14]. Tourism destinations (TD) are affected by climate change, despite adaptation [15]. This because the destinations have come out with systems such afforestation, efficient waste management systems, energy conservation systems and many more to reduce the effect of climate change. Amidst

these pressures, large-scale voluntary improvements in sustainability are improbable, especially given the low public pressure for sustainability and the particular ambivalence toward tourism. Additionally, how about the recent substantial changes in environmental sustainability impacting the global markets, especially emerging markets with substantial environmental resources? Although researchers have investigated CVC in specific tourist contexts, there has been limited investigation of CVC in an environmental sustainability context, which is globally relevant (e.g., [2]). Our research questions are therefore (1) “How does customer value co-creation enhance environmental sustainability in the context of tourism?” (2) “How does customer value co-creation enhance the tourism customer experience?” These perspectives are important because to improve performance across the entire tourism sector, environmentally sustainable resources should be unleashed globally and emerging markets have a substantial proportion of this environmental resources. CVC is key to unleashing these resources globally since they can both innovate and adopt the tourism product-services. Both innovation and adoption are essential for development in the global business environment [16].

This study differs from the previous studies primarily in two key aspects, its focus on addressing environmentally sustainable resources to meet sustainable development goals and its attempt to highlight the latest developing trends regarding value co-creation by delving into a much more expanded base of literature. The globalization of the marketplace has led to a marketing renaissance [17]. The basic premise of co-creation is sharing experiences based on deep interaction with the customers concerned [18]. Engagement of consumers lies at the heart of the co-creation process and positive surprise constitutes the essential element of this process [19]. Thus, value co-creation leads to enhanced personal engagement which not only meets the firms’ goals [20] but the global sustainable development goals. So how are these value co-creation goals specifically related to the environmental sustainability goals and sustainable development goals? What the customer wants, and needs is at the center of it all. Environmental sustainability provides the opportunity for deep interaction between the firm and the customer [18]. CVC provides the avenue for relationship management because both parties have the same goals and value determination when it comes to environmental sustainability. Given the extensive literature on value co-creation and its emerging importance as a strategic managerial arena for consumer engagement [21], it becomes imperative to leverage this direction of the value co-creation literature for CVC and innovation in tourism globally.

We argue that attention to CVC in emerging markets would significantly enhance environmental sustainability globally. Whilst environmental sustainability has been of recent interest in the extant literature, there has been a limited focus on the role of CVC in environmental sustainability. Firms cannot ignore this globalizing trend toward CVC. Even when they decide to ignore CVC in emerging markets, environmental sustainability issues become important to the foreign CVC. As a result, this study focuses on the impact of CVC on environmental sustainability. Given our specific focus on investigating value co-creation of environmental sustainability occasioned by international businesses, the study restricts its analysis only to the discipline of ‘businesses and ‘management’.

This study makes important contributions to research and practice of connecting CVC to environmental sustainability supported by environment exploitation in emerging markets. Our study finds out that CVC in emerging markets can enhance as well as leverage environmental sustainability for tourism in global markets. This includes all environmental management practices to conserve and protect the physical environment such as efficient management of solid and liquid waste and energy creation from waste, production of eco-friendly products, eco-tourism and leverage of national culture.

This paper is structured as follows. The next section describes the theoretical foundation of our conceptual model. Then follows the Section 2 which describes research methods and presents empirical results. It also explores the research design and methodology which covers the research paradigms, research purpose, research strategy, research approach, data collection, and method of analysis. Furthermore, we discuss the research findings, theo-

retical and managerial implications, and limitations. Finally, we summarize the empirical findings and highlight directions for future research.

1.1. Conceptual Developments

1.1.1. Sustainability and Environmental Sustainability

Sustainability performance (SP) is a development that meets the needs of the present without compromising the ability of the future generations to meet their own needs [22]. This explanation of sustainability seem to have received much attention in extant literature and been well cited too. The above definition still lends itself to different understanding as it has not been defined under strict condition. The concept of sustainability has multiple discipline dimensions. The concept has economic, environmental, social and ethical perspectives. From the foregoing explanations, it is therefore clear that sustainability is about effective and efficient use of resources such that the future generations will not be short change.

SP can be classified into three dimensions. Environmental SP, Social SP and Economic SP. Economic sustainability is the ability of the firm to make profit to survive and benefit from the economic systems at the local and national levels. Environmental SP involves the activities of businesses to lend themselves to conservation and preservation of the natural and built environment in a way that its health and integrity is maintained for the future well-being of the destination. Social SP involves the cultural and traditional activities that the tourism destinations (TD) people put in place to sustain the TD's interaction with the environment and the tourists to preserve the destination for future use [23].

Environment sustainability issues have become very important as Michailova and Ciravegna [24] posit that the global economy will become more uncertain in the future and with increasing disruptions to trade, investment, people, and idea flows since their drivers (inequalities, populism, nationalism, and the large state) are here to stay. The concept of environmental sustainability relates to green marketing, which is currently a monumental challenge for both firms and marketers [25]. The definition of environmental sustainability is relevant for distinguishing between growth and development, together with a positive CVC from environmental sustainability. This leads us to our consideration of configuring the business ecosystem to advance the growth debate. The growth debate and sustainability issues are ideally synthesized when environmental sustainability is considered [26]. The motivation behind this paper is to address the conceptual adolescence of environmental sustainability which ignores CVC management as part of the environmental sustainability configuration. A combination of these highlights will elucidate the objectives of this study to show how CVC enhances environmental sustainability in emerging markets and globally.

Environmental marketing, more extensively known as green marketing or sustainable marketing can be defined as the effort by a firm to create and circulate products in a way to promote environmental sustainability [27]. Green marketing refers to all activities designed to generate and facilitate any exchanges intended to meet customer needs with minimal detrimental impact on the natural environment [27]. However, environmental sustainability looms larger than this with the need for an improved global ecosystem [28]. The expansion of green marketing and green customers is "perhaps the biggest opportunity for enterprise and invention the industrial world has ever seen" [29]. Hence, our study seeks to expand this domain with the consideration of customer value co-creation would impact environmental sustainability in emerging markets and globally.

1.1.2. Customer Value Co-Creation and Environmental Sustainability

A careful examination of value co-creation studies highlights two key activities that initiate and advance the process: collaboration and dialogical interactions [4]. The value co-creation activities highlighted in our study are (a) collaboration, which refers to the firm relating to its customer as an equal partner in the co-creation process [30]; (b) dialogical interaction, which refers to interactivity, deep engagement, and the ability and willingness to act by both firm-provider and customer to provide value for each other. This dialogical

interaction come on board when the customers give suggestions, recommendation and ideas to the firm to improve value that would be mutually beneficial to both [4]; (c) learning processes for both the firm-provider and the customer [31]; and (d) creative processes to generate ideas [32].

Both the firm and the customer do the asking, listening, observing and experimenting [33]. Jaworski and Kohli [33] suggest that the purpose of dialogical interaction is not merely to exchange information, but rather, to explore and jointly create new knowledge. The customer must be kept actively interested in the process and aware of the benefits to be motivated to share knowledge and skills [4]. For example, a firm provider may need to provide educational seminars for both parties to be on the same page. To further motivate the customer to support the innovation, the firm should also provide an environment which facilitates innovation [4,34]. Secondly, the firm should provide supportive encounters—emotionally, cognitively and physically [31]. Innovation in tourism is a complex process as indicated by researchers such as Bramwell & Lane [34], hence the importance of CVC.

During value co-creation, all points of interaction between the firm provider and the customer are considered opportunities for learning [4]. Various studies have explained how learning occurs during value co-creation. Value encounter processes facilitate the learning process [35]. The customer's learning is contingent on the ability to integrate his or her operant resources (skills, knowledge, social networks) with the facilitating resources of the firm [31]. The customer's learning is categorized into four critical customer encounters with the firm provider: Engagement, acquisition, integration, and performance [4,36]. This occurs through the use of the product itself and all other related important customer encounters such as encounters with employees, systems and infrastructures [2] that together contribute to the tourism experience.

According to Gronroos [37], three forms of encounters that facilitate value co-creation and associated learning are communication encounters, usage encounters and service encounters. Communication encounters involve activities primarily carried out for dialogical interactions (e.g., through advertisements, brochures, internet home pages and manuals). Usage encounters refer to services that support such usage such as an internet banking support service and service encounters comprise customer interactions with customer service personnel. Payne et al. [31] also classify encounters as emotion-supporting encounters (e.g., stories and metaphors); cognition-supporting encounters (e.g., references and testimonials) and action-supporting encounters (e.g., trial and usage of the product). All these processes plus physical involvement by the consumer in value co-creation would go a long way for environmental sustainability at the global level. In area of tourism, the tourists co-create value in supporting sustainability performance by suggesting ideas and practices that would improve environmental sustainability. For example, tourists may suggest to tourism managers to provide litter bins for disposal of waste to keep the environment clean. More so, tourists support the value creation process by actually putting the waste collected into the bins. This and many more suggestions that tourists provide to support the environmental sustainability also improves the tourists experiences provides the tourism managers also equally support the process of co-creation.

Our study seeks to combine perspectives of consumer value cocreation and environmental sustainability in the area of tourism, especially in emerging markets such in some African countries where opportunity exists to unleash substantial untapped environmental resources. In most African countries, natural capital comprises up to 50 percent of total wealth. With a large quantity of natural resources, including petroleum and agricultural products [38,39]. Additionally, cultural heritage in these emerging markets is a valuable resource in the fields of tourism and sustainable development [40].

2. Materials and Method

2.1. Context

The context of this study is Ghana, an emerging market with many environmental challenges but also endowed with abundant environmental resources. There is therefore

urgent need for value cocreation with the customer for environmental sustainability. Insights from such a movement would have implications globally. Ghana is sited on the Gulf of Guinea and the Atlantic Ocean in West Africa with abundant natural resources that provide diverse tourist attractions all over the country. Along with the fact that Ghana has impressive economic growth that quadrupled by 2011, however, there has been a rapid deterioration of its natural resources.

Regularly (before the COVID-19 period), Ghana registered 1 million tourists yearly (e.g., [41]). There is substantial potential for the development of tourist entertainment complexes, including water parks, water sports, and surfing complexes. Additionally, there is potential for CVC of infrastructure, tourist services, and accommodation facilities near Ghana's national parks and wildlife reserves. There has been massive land, air and water pollution as the country collaborated with foreign countries for the construction of roads, hotels, erection of telecommunication network towers, and energy exploration, among others which have adversely impacted customer wellbeing. Despite this decline, focus on CVC could ensure and maintain positive environmental sustainability in Ghana and the rest of the world.

2.2. Research Design

A multimethod approach was adopted, involving the use of content analysis of the photographs on the Ghana tourism website, and interviews of tourism officials in Ghana. Photographs are tourist locations in the landscape, which is believed to provide more setting-specificity than can be achieved by asking respondents abstract questions and also be invaluable in helping the researcher to categorize specific locations important to the tourist respondents and thus to the study [42]. The guideline for selecting photographs was based on areas that interviewees normally visited.

2.3. Data Collection

The target population comprised organizations and customers defined as groups with some common defining characteristics that the researcher can identify in a study [43]. Data was gathered in the form of a visual analysis of photographs on the website of Ghana and qualitative interviews from 5 foreign tourists and 5 tourist officials from the southern part of Ghana (Volta, Greater-Accra and Central Regions, see Appendix A).

The questions asked the respondents were mainly grand tour questions. For example, how was your experience when you visited tourism sites in Ghana? Which support or advice did you give the tourism managers in order to give improve experiences at the destination? How responsive were the managers in taking your recommendations? The interviews took between twenty to thirty minutes and were recorded and later transcribed.

The study area is integral to the economic development of the country in the areas of employment, revenue generation and infrastructure development and dependent on natural resources for environment sustainability and development of the tourism sector. The characteristics of informants are detailed in Table 1 below.

The participant sample size reflects sample sizes relevant to qualitative studies, which typically range from five to fifteen participants [44]. McCracken [45] argues that for a qualitative study, the respondents must meet these criteria: be perfect strangers, be few and have special knowledge of the topic under study. Random sampling was used to select the foreign tourist while purposive sampling was used to select the tourist officials.

2.4. Data Analysis

The qualitative data was conducted with officials of the Ghana Tourism Authority in the Volta, Greater Accra and Central regions of Ghana and this was analyzed with open and axial coding using the ATLAS TI. Open coding ensured that codes were derived directly from the data by creating categories via labeling and organizing data to highlight different themes. Axial coding identified relationships between the concepts described by these codes. Content analysis was used to analyze the photographs using five themes.

Table 1. Table of Respondents.

Respondents	Age	Gender	Profession
Tourism Official 1	45	Male	Ghana Tourism Authority
Tourism Official 2	50	Male	Ghana Tourism Authority
Tourism Official 3	55	Female	Ghana Tourism Authority
Tourism Official 4	47	Female	Ghana Tourism Authority
Tourism Official 5	53	Male	Ghana Tourism Authority
Tourist/Customer 1	35	Female	Teacher
Tourist/Customer 2	45	Male	Entrepreneur
Tourist/Customer 3	30	Male	Entrepreneur
Tourist/Customer 4	27	Male	Student
Tourist/Customer 5	21	Female	Student

3. Results

Our findings commence with the visual analysis of the photography from the tourism context [46] as shown below.

According to Garrod [42], photographs are tourist locations in the landscape, which is believed to provide more setting-specificity than can be achieved by asking respondents abstract questions and also be invaluable in helping the researcher to categorize specific locations important to the tourist respondents and thus to the study. The following criteria for the analysis were obtained from the direction of Salim, Ibrahim & Hassan [47], MacKay & Couldwell [48] and Smith [49], the dimensions are tabled below (Table 2):

Table 2. Website Analysis.

Dimension	Details
Diversity of Architecture	A uniqueness which sets it apart from other countries.
Language Fluency	The graphic/verbal images are consistent with a catchy slogan
Diversity of culture	Wide range of cultural expression and ornamentation.
Diversity of destination	Aesthetic beauty
Meaning effect	Ecotourism and Sustainability effect
Aesthetic appeal	Colour is used to enhance the aesthetic appeal.
Communicate images of popular destinations	Rich images of popular sites are used to improve the aesthetics of the site
Uniqueness of variety and richness of flora, fauna, artworks and adventures.	The natural history—geology, flora and fauna—add to the story
Visual appeal	The text is clear and readable and the pages are clean and uncluttered.

Adapted from Salim, Ibrahim & Hassan [47], MacKay & Couldwell [48] and Smith [49].

Flora, fauna, ecology and cultural attractions are shown on a tourism website of Ghana in an engaging manner that attracts foreign tourists to visit Ghana. We analyze these photographs as shown below to set the stage for our study (Figure 1):

The above photographic images from the website of Ghana are analyzed in the five different sub-categories of nature, wildlife, culture, adventure and artworks. Mackay and Couldwell [48], indicate that photographs are important to successfully creating and communicating images of a destination. As explained in the Section 2, to understand how customer can engage in value co-creation in Ghana, the areas of interest to the foreign customers, can be placed in the five sub-categories shown above. These five sub-categories were selected based on extant research on visual analysis of destination images (e.g., [48]) stood out in uniqueness of variety and richness of flora, fauna, artworks and adventures for customers. Our qualitative interviews further highlight these unique areas.




NATURE			
	Boti Falls	Mountain Afadzato	Nzulezu village
WILD LIFE			
	Elephant	Boti Falls	Birds
CULTURE			
	Odwira Festival	Homowo Festival	Adowa Dance
ADVENTURE			
	Ghana Paragliding Event	Kakum National Park	Ghana Paragliding Event
ARTWORKS			
	Traditional Carving	Basketry	Jewelry

Figure 1. Photographs of tourist attractions in Ghana.

The qualitative interview detailed below highlight the importance of CVC to environmental sustainability and tourism. The three themes that emerge after data analysis are: (1) customer experience with learning to set the stage for CVC; (2) Conversations around sustainability; (3) Waste management as ecotourism.

3.1. Customer Experience with Learning—Setting the Stage for CVC

Whilst existing studies have found that the stage is set for customer to learn with substantial technological creativity (e.g., [50,51], we discover that the natural environment with limited human fabrication and technology has an alluring appeal for foreign tourist consumers. Foreign Tourist 1 narrates:

It was such a mixed experience for me because I was there on a study abroad program. We went to Cape Coast and the beach resort was lovely, nice break from the city. My most impact from memory was meeting the workers and seeing the fishermen diving and I had never seen people diving in such strong tides. These men were well trained able to hold their breaths for a long period of time. What else stand out to me was the trapeze structure and tree climbing—the lagoon botanical gardens was fun but felt a little contrived. What really stood out to me was the opportunity to see the commerce and ecology. What I learnt that I have been able to apply is the theories and approaches that are more circular and less rooted in industrialization and more rooted in communalism. There is a lot of people that would work in a corporate setting. I suggested to the beach authorities to keep the beach clean by providing liter bins and toilets to keep the beach clean. The liter bins would help tourists put any liter in the bins. The toilet would also prevent open defecation at the beach.

(Foreign Tourist Customer 1)

Foreign tourism 2 agrees with the ideas of Foreign Tourist 1. He also provides similar ideas:

I would say that if you are looking to attract a tourism experience, then it should be tailored to tourists, the heritage and culture. What stood out was having a guide that knew the landscape and could really explain the culture. We came back with a lot of fabric and it was amazing assortment. Trends that are really unique and high end. Beads, fabric and all of that was so fun and so aesthetically exciting and all of this should be played up. A bark from a particular tree processed into ink was a wonderful experience -Adinkra processing in Kumasi and we saw how the looms processed for Kente. I hoped for direct instruction for usage. I suggested that cloth weaving process should be documented for tourists to appreciate.

(Foreign Tourist Customer 2)

The experiences of foreign tourists 1 and 2 are different but both set the stage for CVC with this unique and differentiated learning. Schmitt, Brakus and Zarantonello [52] determine that the experiential purchases of customers are not two ends of a spectrum; however, they do not form one continuum. Therefore, the CVC from a tourist experience in emerging markets are dynamic and not necessarily on a continuum. Zhang, Beatty and Walsh [53] call for a new perspective from cross-cultural research that delves into these topics further. The traditional competencies in our selected context may be quite different from the tourist competencies in the Western world but those are also important to environmental sustainability.

Some reviews from customers on the Ghana tourist website also speak of how the stage can be best set for customer learning and creativity to create a great tourism experience. Some of these reviews are as follows:

“Our holiday exceeded our expectations! From the moment the beaming smile of our driver and guide greeted us at the airport things just got better and better.”

“Our guides were personable, knowledgeable, and excellent at finding the birds we had gone to see ... The whole experience was delightful, we have so many memories and photos that I could go on forever!”

“Promote Ghana as the African people and culture holiday destination.”

The tourist reviews above show that setting the stage for customer creativity and learning begins with stories and information provided to them by the tour guides or drivers. These stories and information from the local setting are very different from

what the customers know in their more advanced countries with substantial investment in technology. The insights provided by customers also lead to conversations around environmental sustainability as detailed below:

3.2. Conversations around Sustainability

The conversations around sustainability can be observed as a way in which the foreign tourist customers provided their views about sustainability in relation to the experienced tourist environment. Foreign tourist customer 3 narrates after an exciting tourist experience in Ghana:

How do you start a conversation about sustainability? The museum experience should be constantly updated and should not be underfunded. Tourist should know by going to the king's palace, the exhibits should have a different content to them to explain the exhibits. A water purification system is ecology and seeing untreated water go through the system and students were amazed so these kinds of civil engineering projects are really amazing and should be highlighted.

(Foreign Tourist Customer 3)

From the narration of foreign Customer 3, our findings determine that CVC can improve with responsible tourism and hence environmental sustainability of tourism destinations. The customer's ideas embody perspectives from the Western environment with economic resources and technological knowledge, leading to more organized museums. Foreign customer 3 speaks of these organized museums. He is however amazed at the civil engineering projects that makes use of adapted technologies to process waste from the local environment into usable resources. Foreign Customer 4 provides in views about these reviews and opportunities for sustainability. He comments:

The positive word of mouth is not fully exploited. Generally, people are friendly and helpful, have deep cultural heritage, colonial history, coast line, jungle, diverse population, safe, inviting and interesting country. Drawbacks are that tourism is not highly developed, few resorts, few hotels, look at South Africa and Kenya and adapt their strategies.

(Foreign Tourist Customer 4)

Foreign customer 4 shares his ideas about the enhanced leverage of word-of-mouth opportunities from other tourist, which in itself results in social sustainability. Social sustainability is about recognizing and directing business impacts, both positive and negative, on consumers [54]. The reviews speak of the warmth of the people, the richness of the Ghanaian culture, the infectious songs and dances as well as the stark beauty of the landscape. All of these are sustainability perspectives that would enhance the wellbeing of consumers. These perspectives speak of a different and traditional tourist experience and serve as a positive word of mouth marketing as well. Tourist official 1 also details:

In terms of tourism (on which most of our business depends), it is positioned on corporate business only and not on tourism. For us, our market is business customers and less on tourist market but if tourism was well developed, that will help us to pursue the tourist market as well. Tourism is in need of improvement. There is serious need for improvement in tourism. There are no museums, comparatively, no tourist attractions. So still, there is a lot of work to be done. More roads to the tourism sites should be developed and Guesthouses constructed to allow overnight stays. More trees should also be planted to increase the afforestation of the sites.

(Tourist official 1, Ghana Tourism Authority)

Tourist official 1 recognizes that tourist in Ghana is in need of improvement. This makes the CVC so essential. He determines that there is a lot of work to be done. CVC is a great starting point as a result of this recognition and could be leveraged as a free resource, even more relevant than those of consultants.

3.3. Waste Management as Ecotourism

Echoes of sustainability brings to the forefront that waste is a resource and could be used effectively for ecological development. Ecotourism supports sustainable environmental development. The aim of ecotourism is to reduce the impact that tourism has on naturally beautiful environments. Tourist destinations could be destroyed by increasing levels of tourism. The destruction of tourist areas would make them unavailable to future generations. Tourist official 2 explains:

Mining, air pollution and littering of the beaches are some examples of bad value co-creation. Inadequate rainfall and mining in water bodies cause the drying and pollution of water bodies. Bush fires cause us to lose animals and vegetation so customers cannot see the animals they want to see. Also, heat waves occur and the river bodies like waterfalls are destroyed. The effect of illegal mining called 'galamsey' has brought about a bad tourism value co-creation. The Chinese, with a lot of money use chemicals to destroy nature, and cut down trees. Although customers may even want to drink water from these water bodies, they stand to catch diseases or get poisoned. Also, since the flow of water is affected in these areas, water is no longer available for swimming. The aquatic life is also affected. Most of the things we use to produce energy also affect the environment; and energy conservation like solar panels.

(Official 2, Ghana Tourism Authority)

The narration of Official 2 is in line with the perspectives of Maignan & Ferrell [55] that call for a more universal and comprehensive corporate management strategy that can gather environmental intelligence and disseminate market information to broader stakeholders with the help of marketing systems that are responsive to customer needs. Also, when good sanitation and environmental conditions as well as social and economic sustainability performance are adhered to, waste management is effectively controlled. According to Official 3:

Deforestation, indiscriminate cutting of trees and illegal mining badly affect the environment. When the water is contaminated, the water dries up and customers cannot get the actual satisfaction they are looking for. Customers get diseases from the water bodies and pollution of the water itself destroys fish and other living things in the water. Once a customer cannot see these things in the water, his or her value co-creation becomes dissatisfying. More trees should be planted and bushfires prevented from destroying the forest. Government effort to stop illegal mining should be intensified to save our forest and water bodies which are resources for tourism.

(Official 3, Ghana Tourism Authority)

Official 3 indicates in his narration that environmental sustainability has not been encouraged through collaboration with Chinese foreigners whose indiscriminate activities with the locals have led to the destruction of water bodies and vegetation in the country which results in customer contracting diseases. The narration of official 3 highlights the increasing importance of customer value management which has its roots in applying the information to acquire and retain customers and to drive customer behavior with developed marketing strategies [56]. Such strategies would involve putting oneself in the shoes of the customer to prevent diseases caused by indiscriminate activities that adversely impact the environment.

All the tourist officials acknowledge that CVC is an opportunity to enhance tourism in Ghana and to unleash resources from the environment as resources for consumption by consumers such as energy creation, afforestation and plastic and water recycling. With CVC, an opportunity presents itself in the adverse circumstances for waste management. Official 4 indicates this fact in his narration:

Waste management is the main effect on the environment. Mining is another problem. The harmonization of the human being on earth thrives on environmental resources. The cause of environmental problems is more than the natural environment which includes

artificial environments. There is so much waste caused by customers on site. The animal species are not well sustained and the pollution and lumbering without replanting are very hostile to the environment. The whole forest is not understood. The alternative livelihood of the locals is also affected. Greening is affected and the lifestyle of the ecosystem is limited thus affecting most of the tourist sites. The holistic responsibility of families who depend on the environment is affected. So those who exploit natural resources need the appropriate environment. All these present an opportunity for waste management.

(Official 4, Ghana Tourism Authority)

As indicated by Official 4, waste management is an opportunity that presents itself for the customer to be engaged in environmental sustainability. As discussed by Beckers, Van Doorn & Verhoef [57], in today's connected world, CVC behaviors are key. Such behaviors provide a platform for CVC. Companies that launch initiatives to stimulate CVC could therefore benefit from waste management. CVC in the form of value co-creation for environmental sustainability can leverage on social media for waste management as a strategic approach. According to Osei-Frimpong, McLean & Famiyeh [58], waste management has engaged the attention of governments, policymakers, and academics for the health and well-being of consumers. Our study validates this fact and discovers that consumers can engage in value co-creation for waste management by providing their feedback to the tourist officials. This feedback also assists governments in drawing better environmental regulatory policies.

Official 5 from the Ministry of Tourism in Ghana discusses how there is limited enforcement of laws by the Ghanaian authorities to ensure environmental sustainability by limiting pollution. He narrates:

Contaminated water reduces hygiene for the customer. Air pollution creates liver problems, lung and eye diseases. Customers go to tourist sites for entertainment and some for peaceful rest. The food that the person eats is also affected and at the end of the day, customers have illnesses. The laws are not properly enforced by the authorities. There may be rules but enforcing them is a problem. Plastic is being recycled to produce bags, chairs, and other materials. Solid waste can be used to produce biogas. Sewage like liquid and solid waste with urine and human excreta can also be processed into biogas for cooking and even electric power. The leftover waste is used as manure in the agriculture industry. Individual and institutional customers use this recycling for their energy which improves their experience at the destination. These customers are involved in the separation of waste. Customers are educated to support environmental sustainability.

(Official 5, Ghana Tourism Authority)

Customers who experience pollution of this nature should be protected by the proper enforcement of laws to limit the destruction of the environment, especially through noise pollution and deforestation. Customer value co-creation is however a resource in this situation as customers share their ideas, knowledge and networks. This support to co-create energy from waste materials by customers should however be initiated by local institutions as indicated by a local customer:

The operation of foreigners to make use of our natural resources also leads to noise pollution and land degradation that badly affects the customer. Activities of foreigners in illegal mining affect flora and fauna. Customers therefore cannot enjoy the environment. There is an agency that regulates tourism but with eagerness to get more business from foreigners, the staff get negligent and cannot ensure that all the laws are obeyed. So, we need the customer to be part of this enforcement.

(Ghanaian customer 1)

4. Discussions

The findings of our study show that firms that do not enhance their environmental sustainability and customer engagement will lose patronage. Secondly, the attitude of

most of these tourists who continually visit unclean tourism destinations such as littered beaches and polluted water bodies would continue to make these TDs not improve in their environmental products, hence, performing poorly in environmental sustainability performance. This means that Ghanaian tourism businesses must continue to engage their visitors to provide the required environmental sustainability products such as forest and animal conservation for the good of the eco-tourism industry. When this is done, it attracts more foreign and local tourists to destinations which can improve tourist experiences and hence increase the country's revenue through tourism,

Marshall & Farahbakhsh [59] recommend an adaptive system of thinking which can be applied by consumers for solid waste management in emerging markets to compensate for the institutional voids. Marshall & Farahbakhsh [59] indicate that the health and environmental implications of environmental issues are mounting in urgency, particularly in the context of emerging markets. This perspective contrasts with the focus in industrialized countries on the utilization of waste—waste is a useful energy resource and this perspective could be furthered with CVC. In industrialized countries, climate change, public health, resource scarcity and public awareness and participation have been drivers of environmental sustainability. However, urbanization, inequality, and economic growth, policy, governance, institutional issues, and related environmental and socio-cultural hostilities have exacerbated environmental sustainability issues in emerging markets [59]. CVC could play a role in converting the threats in emerging markets in the area of environmental sustainability into opportunities. The conversion of waste into energy is a way for consumers to support environmental sustainability whilst assisting product development as a mode of value co-creation. Waste Management is therefore a profitable area of CVC.

4.1. Theoretical Implications

Our study also answers the calls for international business researchers to engage in value co-creation with customers for environmental sustainability performance (e.g., [60]). It is also a call for the contribution of tourism information to government policy and regulation which improves sustainability (e.g., [16]). This study investigates customer value co-creation (CVC) as a strategic direction and firm capability with goals of achieving environmental sustainability. We highlight the fact that CVC is more effective for environmental sustainability through setting the stage for customer value cocreation, conversations around sustainability and waste management. Kumaraswamy et al. [61] present the fact that market liberalization in emerging markets is an opportunity for new global initiatives. Executives, in turn, might use their oversight to guide the establishment of a dynamic capability system and to foster the firm's overall dedication to long-term customer loyalty.

4.2. Managerial Implications

This study introduces three strategic directions for designing CVCs in emerging markets: (1) Setting the stage for customer value cocreation; (2) Conversations around sustainability and (3) waste management in the selected context of Ghana, can find that most of the threats in environmental sustainability and tourism are human induced. Africa boasts of untapped resources and business opportunities that can yield huge returns and fully impact the nation's economy, example access to safe water supply and sanitation [62].

To improve this situation, businesses must continue to engage visitors on the things they need at these destinations in to increase patronage and revisits to improve revenue and profitability. In Ghana, it is realized that most of these tourism enterprises are not able to transform into medium and large-scale businesses as a result of their limitations of lack of resources. This is an opportunity to engage the customers in value co-creation. In areas where tourism businesses engage their communities, they are more likely to improve environmental sustainability performance. CVC could be leveraged to improve tourism development. For example, through CVC, museums in emerging markets can be further developed.

Tourism managers should be ready accept the recommendations by customers and fashion them into their strategies in order to improve environmental sustainability and tourists experiences. For example, some of the customers suggested to the tourism managers to provide waste bins so that waste generated can be put them. If this suggestion taken by tourism managers and implemented, it would help in the proper management of waste in the tourism destinations and hence promote environmental sustainability. Another customer also recommended that more trees should be planted in order to improve afforestation and hence flora and fauna. If this suggested is implemented, it would improve the green vegetation at the tourism destinations and hence environmental sustainability. More so, some of the foreign customers engage illegal mining activities that destroy the water bodies and degrade the soil. When more mining laws are enforced efficiently it would go a long to reduce these illegal mining activities in water bodies and reduce its pollution. The study finally conclude that firms that do not enhance their environmental sustainability and customer engagement will lose patronage.

4.3. Limitations and Future Research Directions

The primary limitation is that the study uses one target country, and one source of emerging market entities and thus cannot be generalizable. However, given the rapid expansion of China, and its initiatives in Africa (and other emerging markets), it is observed that there is a substantial opportunity to cocreate environmentally sustainable initiatives with both local and foreign customers. This will have a halo effect on any other companies that have the same country of origin as being exploited. This is an area that would be ripe for further study i.e., exploring the country of origin effect on brands when a country's initial exposure to a foreign country is one where resource extraction has taken place, and the case of Ghana has been abused. Our study finds that in emerging markets, CVC for environmental sustainability through social media is an opportunity because of the availability of extensive social networks and rich endowment of natural resources.

This study also focuses only on customers for value co-creation. Beyond just CVC, other stakeholders are relevant to the value cocreation process for environmental sustainability as revealed in our study. Other brand co-creation process suggested by Payne et al. [31], Boyle [63], Ramaswamy & Ozcan [64] involve other stakeholders who facilitate seamless execution of the co-creation processes [65]. The dynamic nature of cocreation makes it necessary for researchers to join hands with practitioners to advance research in this area [66].

5. Conclusions

Our study investigates how customer value co-creation enhances environmental sustainability in emerging markets and globally and in this manner also enhances the customer tourist experience. Our findings show that as emerging economies develop, and customers observe the first-hand impacts of both local and foreign resource exploitation, it is clear that they become more sensitive to environmental sustainability. Our selected context of study was Ghana, an emerging market with substantial environmental challenges but endowed with abundant environmental resources. This study borders on transnational similarities since different cultures and population around the world have similar needs and aspirations [67].

The study concludes that CVC improves environmental sustainability performance in emerging marketing. The study further concludes, co-creation is not only about customers but involve other stakeholders like the communities, the government, the media that go a long way to improve environmental sustainability. The study also concludes that the attitude of most of these tourists who continually visit unclean tourism destinations such as littered beaches and polluted water bodies would continue to make these TDs not improve in their environmental products, hence, performing poorly in environmental sustainability performance.

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Appendix A

Map of the Study Area-Volta, Greater-Accra and Central Regions.

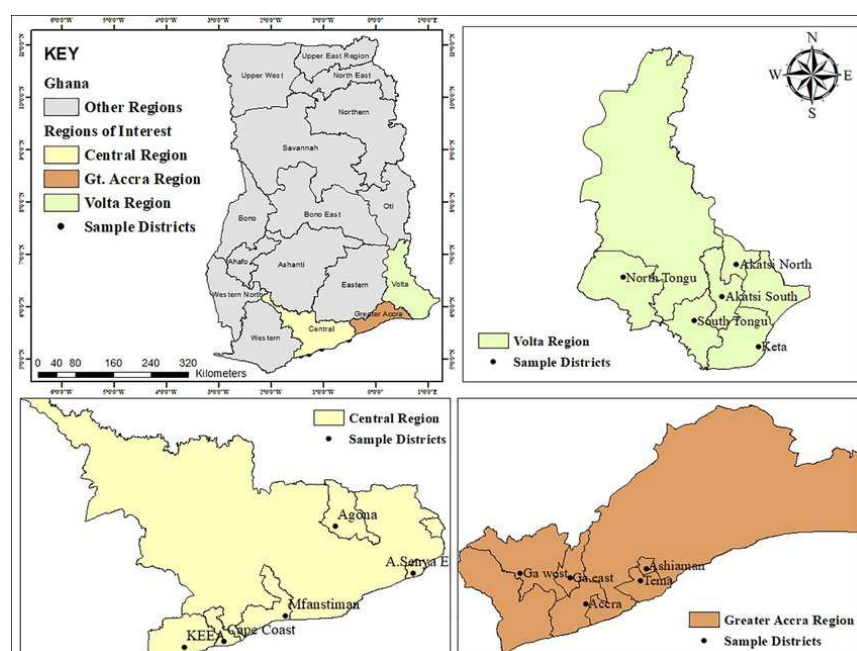


Figure A1. Map of Ghana showing study regions (Central, Volta and Greater Accra regions) Adapted from [68].

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